



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,931	04/28/2005	Andrew Butterworth	STHP-018	5683

24353 7590 11/20/2006

BOZICEVIC, FIELD & FRANCIS LLP
1900 UNIVERSITY AVENUE
SUITE 200
EAST PALO ALTO, CA 94303

EXAMINER

ROGERS, KRISTIN D

ART UNIT	PAPER NUMBER
----------	--------------

3736

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/507,931	Applicant(s) BUTTERWORTH, ANDREW	
	Examiner Kristin D. Rogers	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-6, 9-11 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimura (5137028). In regard to claim 1, Nishimura shows a vaginal indwelling thermometer in which the thermometer comprises temperature sensing means 1, signal means 38, a micro-computer to store temperature data 32, and a mechanical tone indication. In regard to claim 2, the signal is a buzzer or alarm 38 (column 3, lines 35-41). Applicant's disclosure has recited indwelling to mean a device that is left in a predetermined location for a long period of time. As broadly as claimed, the reference of Nishimura teaches inserting the vaginal thermometer for a period of minutes as opposed to seconds. Since minutes are a long period of time when compared to seconds, Nishimura meets the claim limitation of an indwelling thermometer as recited in claim 1. In regard to claim 3, the temperature sensing means is electronic (See Figures 1 and 2). In regard to claim 4, Nishimura shows an indwelling thermometer in which the temperature sensing means comprises a printed circuit board (Figure 2). In regard to claim 5, Nishimura shows an enclosed hollow container having two chambers (cylindrical end at 30 and cylindrical end at 30S) and a waisted portion (base near 30S). In regard to claim 6, Nishimura shows the temperature sensing means contained in the waisted portion of the thermometer (Figure 2). The Examiner is taking the temperature sensing means to include the circuitry that is contained in the waisted base portion near 30S. In regard to claim 9, the

Art Unit: 3736

thermometer data relates to temperatures below and above a threshold temperature (column 6 lines 47-66). In regard to claims 10 and 11, the microcomputer 31 contained in the thermometer determines the predetermined threshold (column 6 lines 67 to column 7 line 30). In regard to claims 19-21, Nishimura shows a method of determining ovulation and determining infection (fever) comprising the steps of inserting a thermometer into the vagina of a human female, allowing the thermometer to indwell, and periodically observing the signal means (indication on the display) to detect a signal (indication of ovulation based on sensed temperature or indication of fever as determined by information stored in the devices memory. See column 4, lines 22-47).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nollen (3895523). Nishimura shows a vaginal indwelling thermometer but lacks temperature sensing means comprising a wax with a melting point close to the temperature threshold or a signal means consisting of a dye. Nollen teaches a disposable thermometer that includes dye and Vaseline (wax or grease) that is released at a predetermined temperature. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Nishimura with dye and a grease such as Vaseline as taught by Nollen for an indication that a predetermined temperature threshold was sensed.

Art Unit: 3736

5. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Hof et al. (4345470). In regard to claims 12 and 13, Nishimura shows a vaginal indwelling thermometer but lacks disclosure of the material from which the thermometer is made and a thermochromatic temperature sensing means. Hof et al. teaches a thermometer made from plastic and further comprising an opaque indicator means "C" that is heat-sensitive and changes color in response to temperature changes and upon change of temperature the color change remains (abstract and claims 2-4). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Nishimura with a thermochromatic temperature sensing means as taught by Hof et al. for an indication that a predetermined temperature threshold was sensed.

6. Claims 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Weiland (5499631). Nishimura shows a vaginal indwelling thermometer for use in a human female for detecting ovulation, but lacks more than one temperature sensing means comprising a kit and is. Weiland teaches a vaginal indwelling thermometer with multiple test electrodes that are capable of temperature sensing elements 3 (column 3, lines 3-5, Figure 1 and claim 17) for detecting temperature. Each temperature sensor 3 is isolated from the other sensors and individually connected to the probe 1 and has a separate connection channel 11 the reads a parameter sensed by the specific sensor (column 3 lines 30-31 and lines 46-51). As broadly has claimed, Weiland teaches a kit of thermometers as claimed by the applicant. Therefore it would have been obvious to one having ordinary skill in the art at

Art Unit: 3736

the time of the invention to modify Nishimura with a kit of multiple temperature sensing means as taught by Weiland for taking multiple temperature readings.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Weiland and further in view of Nollen. Nishimura shows a vaginal indwelling thermometer but lacks disclosure of a kit of thermometers that sense temperature over a predetermined range. Weiland teaches a kit of thermometers, but lacks disclosure of the temperature range in which the thermometers sense a change in temperature. Nollen teaches a thermometer consisting of multiple temperature sensing capsules that are released at predetermined temperatures ranging from 37 degree Celsius to 40 degree Celsius. Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to modify Nishimura with a kit of thermometers that sensed temperature changes over a predetermined range of temperatures as taught by Weiland and Nollen for detecting changes in body temperature indicating ovulation.

Response to Arguments

8. Applicant's arguments filed September 21, 2006 have been fully considered but they are not persuasive.

9. In response to applicant's argument that Nishimura does not teach a vaginal indwelling thermometer, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art

Art Unit: 3736

structure is capable of performing the intended use, then it meets the claim. Therefore, as broadly as structurally claimed, Nishimura meets the claim limitation of being inserted into the vagina for detecting temperature as claimed by Applicant.

Furthermore, the Examiner submits in response to applicant's arguments that Nishimura does not teach an "indwelling" thermometer, that although "indwelling" has been defined in the Applicant's disclosure, the disclosure is unclear in defining "a long period of time." As broadly as claimed, the reference of Nishimura teaches inserting the vaginal thermometer for a period of minutes as opposed to seconds. Since minutes are a long period of time when compared to seconds, Nishimura meets the claim limitation of an indwelling thermometer as recited in claim 1.

10. In response to Applicant's arguments that Nishimura and Weiland does not teach a kit of thermometers, the Examiner submits that Weiland teaches a vaginal indwelling thermometer with multiple test electrodes that are capable of temperature sensing elements 3 (column 3, lines 3-5, Figure 1 and claim 17) for detecting temperature. Each temperature sensor 3 is isolated from the other sensors and individually connected to the probe 1 and has a separate connection channel 11 the reads a parameter sensed by the specific sensor (column 3 lines 30-31 and lines 46-51). As broadly has claimed, Weiland teaches a kit of thermometers as claimed by the applicant.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3736

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristin D. Rogers whose telephone number is 571.272.7293. The examiner can normally be reached on Monday through Friday 8:00am - 4:30pm EST.

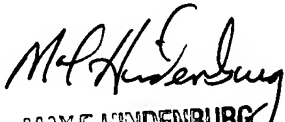
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571.272.4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3736

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KDR

KDR


MAX F. HINDENBURG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700